

Amendments to the Claims

The listing of claims will replace the previous version, and the listing of claims.

Listing of Claims

1. (currently amended) A gas chromatograph with a fluid control assembly for controlling flow and pressure of gas, said fluid control assembly comprising:

a flow path,

a control valve situated in the flow path and being capable of adjusting an opening degree thereof,

a flow resistance provided in the flow path at a downstream side of the control valve,

a sample introducing part provided in the flow path at a downstream side of the flow resistance,

~~differential~~ first pressure detecting means attached to the flow path between the control valve and the flow resistance for detecting a ~~differential~~ pressure ~~between two ends of the flow resistance~~ thereat,

second pressure detecting means attached to the flow path between the flow resistance and the sample introducing part for detecting a pressure ~~on an upstream side or a downstream side of the flow resistance~~ thereat, and

control means attached to the control valve, ~~differential pressure detecting means~~ and the first and second pressure detecting means for carrying out a predetermined calculation based on signals from the ~~differential pressure detecting means~~ and the first and second pressure detecting means for controlling the opening degree of the control valve ~~based on a result of the calculation~~ so that flow amount or pressure in the flow path can be controlled at a predetermined value by the first and second pressure detecting means.

2. (canceled)

3. (currently amended) A gas chromatograph according to claim 1, further comprising a bomb for providing a fluid to the flow path at an upstream side of the control valve, ~~and a sample introducing part, said fluid control assembly being situated between the bomb and the sample introducing part.~~

4. (new) A gas chromatograph with a fluid control assembly for controlling flow and pressure of gas, said fluid control assembly comprising:

a flow path,

a control valve situated in the flow path and being capable of adjusting an opening degree thereof,

a flow resistance provided in the flow path at a downstream side of the control valve,

a sample introducing part provided in the flow path at a downstream side of the flow resistance,

differential pressure detecting means attached to the flow path for detecting a differential pressure between two ends of the flow resistance,

pressure detecting means attached to the flow path between the flow resistance and the sample introducing part or between the flow resistance and the control valve for detecting a pressure thereat, and

control means attached to the control valve, the differential pressure detecting means and the pressure detecting means for carrying out a predetermined calculation based on signals from the differential pressure detecting means and the pressure detecting means for controlling the opening degree of the control valve so that flow amount or pressure in the flow path can be controlled at

a predetermined value by the differential pressure detecting means and the pressure detecting means.

5. (new) A gas chromatograph according to claim 4, wherein said pressure detecting means is attached to the flow path between the flow resistance and the control valve for detecting the pressure thereat.

6. (new) A gas chromatograph according to claim 1, wherein said flow amount is calculated based on a value of the second pressure detecting means and a differential pressure value between the first and second pressure detecting means, and the flow pressure is obtained from the second pressure detecting means.

7. (new) A gas chromatograph according to claim 4, wherein said flow amount and flow pressure are calculated based on a value of the pressure detecting means and a value of the differential pressure detecting means.